

Amendments to the Specification:

Please amend the specification as follows:

**Page 14, delete the first full paragraph and insert  
therefore the following:**

The extract of the present invention ~~provides~~ includes 1) the water extract of the root or stem of *Acanthopanax koreanum* 2) the ethanol insoluble part among the said water extract, obtained by treating the said water extract with ethanol, 3) the fraction containing polysaccharide with a molecular weight larger than range of 12,000~14,000, among the said ethanol insoluble part, or 4) the fraction containing polysaccharide with a molecular weight larger than 100,000, among the said ethanol insoluble part.

**Page 15, delete the first full paragraph and insert  
therefore the following:**

The present invention uses *Acanthopanax koreanum* of which the place of origin is KOREA. ~~The common extract of Acanthopanax koreanum is prepared by treating the root or leaf of Acanthopanax koreanum with solvent. Furthermore, to apply Acanthopanax koreanum to experimental or drug material, it must be withered up. The known extract of *Acanthopanax* sp. relates to the extract of the stem or leaves of *Acanthopanax senticosus*. Furthermore, to apply *Acanthopanax senticosus* to experimental or drug material, it must be withered up.~~ However, in the present invention, the extract of *Acanthopanax koreanum* obtained from the root of the *Acanthopanax koreanum* has the same efficiency as

one obtained from the stem thereof. Therefore, *Acanthopanax koreanum* does not have to be withered up.

**Delete the paragraph bridging Pages 17 and 18 and insert therefore the following:**

Figure 9 shows that the fraction containing polysaccharide with a molecular weight larger than 100,000, among the said ethanol insoluble part influences the expression of pro-apoptotic protein. Particularly, the result shows that the said fraction used in the experiment inhibits the expression of Bax protein concentration dependently. Also, ~~in case that pro-apoptotic protein is Bid protein in case of Bid protein which is one of pro-apoptotic proteins~~, experimental group to which the fraction containing polysaccharide with a molecular weight larger than 100,000 is administered, has a similar inhibition relative to the control group concentration dependently. Therefore, the said fraction containing polysaccharide with a molecular weight larger than 100,000 inhibits the expression of pro-apoptotic protein activated by TNF- $\alpha$  in liver cell.

**Page 26, delete the first full paragraph and insert therefore the following:**

The water ~~extract~~ insoluble part obtained from the root or stem of *Acanthopanax koreanum* was treated with ethanol to prepare the ethanol extract. 15.5g or 20.7g of the ethanol ~~extract~~ insoluble part was dissolved in the water, respectively. The solution was dialysed through the dialyzing diaphragm passing the compound with a molecular weight smaller than 100,000, thereafter filter cake was lyophilized. Yield of the fraction containing polysaccharide with a molecular weight

larger than 100,000, obtained from the ethanol ~~extract~~ insoluble part prepared from the root or stem of *Acanthopanax koreanum* is 12% or 10.2%, respectively.

**Page 27, delete the second paragraph and insert therefore the following:**

The extract containing polysaccharide, obtained from the stem of *Acanthopanax koreanum* is mainly comprised of polysaccharide with a molecular weight 900,000. Also, polysaccharide with a various molecular weight, for example, 450,000 or 250,000 was contained in the extract. Also, polysaccharide with a molecular weight in the range of 14,000~200,000 was contained in the extract. The extract containing polysaccharide, obtained from the root of *Acanthopanax koreanum* is mainly comprised of polysaccharide with a molecular weight more than 1,000,000. Also, polysaccharide with a various molecular weight, for example, 2,000,000, 450,000 or 300,000 was contained in the extract. More polysaccharide with a molecular weight in the range of 14,000~200,000 was contained in the extract of the stem root than that of the root stem.

**Delete Table 4 bridging Pages 34 and 35 and insert therefore the following:**

**Table 4**

The effect of various extracts of *Acanthopanax koreanum* root on the serum level of TNF- $\alpha$  in liver-injury mice model induced by D-GalN/LPS.

Group	Amount (mg/kg)	TNF- $\alpha$ (mg/kg) pg/ml

Normal group		-	26±13
Physiological saline solution-treated group (control group)		-	678±29
The water extract-treated group		50	124±36
		300	74±26
The 70% ethanol extract-treated group		50	648±104
		300	587±87
Treating the water extract with ethanol	The ethanol insoluble part-treated group	50	102±26
		300	59±15
	The ethanol soluble part-treated group	50	605±92
		300	260±45
The fraction containing polysaccharide with a molecular weight larger than range of 12,000-14,000		50	32±12
The fraction containing polysaccharide with a molecular weight larger than 100,000		30	45±21
		100	29±12
The said result derives from mean±SEM of measurements obtained from the experiments of five times, five times and six times as for normal group, physiological saline solution-treated group and the extract-treated group, respectively.			

Delete Table 5 bridging Pages 35 and 36 and insert therefore the following:

**Table 5**

The effect of various extracts of *Acanthopanax koreanum* stem on the serum level of TNF- $\alpha$  in liver-injury mice model induced by D-GalN/LPS.

Group	Amount (mg/kg)	TNF- $\alpha$ (mg/kg) pg/ml

Normal group		-	26±11	
Physiological saline solution-treated group (control group)		-	785±17	
The water extract-treated group		50	132±28	
		300	67±16	
The 70% ethanol extract-treated group		50	690±110	
		300	678±54	
Treating the water extract with ethanol	The ethanol insoluble part-treated group	50	62±16	
		300	566±55	
	The ethanol soluble part-treated group	50	233±43	
		300	28±11	
The fraction containing polysaccharide with a molecular weight larger than range of 12,000-14,000		50	32±12	
The fraction containing polysaccharide with a molecular weight larger than 100,000		30	32±12	
		100	25±11	
The said result derives from mean±SEM of measurements obtained from the experiments of five times, five times and six times as for normal group, saline solution-treated group and the extract-treated group, respectively.				

Delete the paragraph bridging Pages 44 and 45 and insert therefore the following:

700mg/kg of D-GalN and 10 mg/kg of LPS were intraperitoneally administered to the mice. The fraction or physiological saline solution was intraperitoneally administered to the mice at 12 hours and 1 hour before administration of D-GalN/LPS. The said fraction was

administered to the mice in amount of 10 mg/kg, 30 mg/kg or 100 mg/kg. Liver cell isolated from the mice to which the said fraction or physiological saline solution was administered was added to lysis buffer solution (prepared by mixing 50mM Tris-HCl, 1% Nonidet P-40, 1mM EDTA, 1mM phenylmethyl sulfonyl fluroride, 1g/ml leupeptin with 150mM NaCl, pH 7.5), then homogenized and centrifuged at 15,000 × g for 10 min to prepare crude protein. Total concentration of protein was measured by using Bradford method. 50  $\mu$ l of protein was loaded at 12%~15% sodium dodecyl sulfate polyacrylamide gel. After electrophoration the said gel was transferred to PVDF membrane (Millipore, Bedford, MA USA). ~~The membrane was kept at the solution prepared by mixing Tris buffered saline solution and 0.1% Tween 20 (Sigma corp.), then 5% skim milk was added to the said solution. Primary~~ The membrane was incubated for 3 hours in the solution prepared by mixing Tris-buffered saline solution and 0.1% Tween 20 (Sigma corp.) and adding 5% skim milk. Then, primary antibody such as rabbit polyclonal anti-Bax antibody (Santa Cruz Biochemicals, Santa Cruz, CA USA) or anti-Bid antibody (Santa Cruz Biochemicals, Santa Cruz, CA USA) was incubated in the said membrane. Thereafter, the membrane was washed with buffered saline for 15 min and three times. Thereafter, secondary antibody was incubated in the membrane for 1 hour. The membrane was washed. Expression of protein was measured with Amersham ECL system (Amersham Pharmacia Biotec, Buckinghamshire, UK).